

DATASHEET

# Hitachi Virtual Storage Platform (VSP) 5000 Series

## The most powerful enterprise scale-out, future-proof data platform.

The Hitachi Vantara VSP 5000 series storage is a next-generation infrastructure offering designed to provide a modern foundation for digital transformation and data center modernization. VSP is designed to be the highest performance, scalable and resilient data storage platform on the market.

The Hitachi Accelerated Fabric allows Hitachi Storage Virtualization Operating System RF (SVOS RF) to offload I/O traffic as you scale out your data platform, delivering up to 33 million IOPS with latency as low as 39 microseconds. Mixing NVMe and SAS flash and HDD together allows you to get the most economic \$/GB rates available up to 69PB of capacity.

**We offer two models of the 5000 series block storage platform. Start small with a VSP 5200 and then easily scale-up and out to a full-blown VSP 5600 with 12 active/active controllers**



- 5.1M IOPS
- 40 Cores
- 1TB Memory

23.1PB MAX. RAW



- 33M IOPS
- 240 Cores
- 6TB Memory

69PB MAX. RAW

## Product Overview

### Scalability

The VSP 5000 series is built on self-optimizing and self-protecting true scale-out technology, and resources can failover across node controllers, across nodes, and across the controller blocks that include storage media. Storage Virtualization Operating System RF (SVOS RF) provides Adaptive Data Reduction (ADR) to maximize every GB of storage with greatly improved scalability and performance and can virtualize the capacity stored in Hitachi or 3rd party storage arrays, extending the life of those arrays by providing next-generation data services and data reduction capabilities to legacy storage arrays.



## Key Product Features

- The World's Fastest NVMe Storage
- Flexible scale up and out to 33M IOPS and 69PB of capacity
- The only enterprise storage built for 8 9's of availability in hardware alone
- Smart Data Reduction: Up to 4:1 elective capacity, guaranteed "sight unseen" with hardware-accelerated, AI managed data reduction
- Support any workload from Open to Mainframe
- Non-Disruptive, data-in-place migrations
- Supported by a 100% Data Availability Guarantee



**Resiliency and Availability**

While VSP 5600 delivers 9's of availability, all our VSP arrays are backed by Hitachi's 100% Data Availability guarantee. Our 100% data availability ensures that our customers meet information availability requirements.

Hitachi storage systems are engineered to have an active/active architecture with no single points of failure and multiple levels of redundancy. We build them with the latest in proactive alerts to resolve issues before they become outages and conduct extensive quality assurance tests prior to release.

**Performance**

The enterprise-level VSP 5000 series start as small as 3.8TB and grows to 69PB of raw capacity. With scalability to handle up to 33 million IOPS, multiple application workloads can be consolidated for cost savings. All models in the VSP 5000 series are backed by the industry's most comprehensive 100% data availability guarantee to ensure that your operations are always up and running. Hitachi Remote Ops monitoring system and Hitachi Ops Center Analyzer enable industry-leading uptime.

**Key Product Specifications**

<b>Hitachi Virtual Storage Platform 5200</b>	
Performance (IOPS)	5.1M
Performance (Latency)	as low as 60µ
Performance (Bandwidth)	52GB/s
MAX. Raw Internal Capacity	23.1PB (30TB SSD)
MAX. Raw External Capacity	287PB
Data Availability	100% Guaranteed

<b>Hitachi Virtual Storage Platform 5600</b>	
Performance (IOPS)	33M
Performance (Latency)	as low as 39µ
Performance (Bandwidth)	312GB/s
MAX. Raw Internal Capacity	69.3PB (30TB SSD)
MAX. Raw External Capacity	287PB
Data Availability	100% Guaranteed

**Storage Simplified with Data Services**

Our products provide a comprehensive set of data services, including in-system/local/remote replication, clones, snapshots, thin provisioning, deduplication, compression, tiered storage management, and data mobility across the Hitachi VSP platform family while supporting all the major host operating systems.

- **Hitachi Ops Center** simplifies replication management tasks by enabling the creation of policy-based copy data management workflows to meet enterprise data protection requirement for both primary and secondary storage, multiple data center topologies, application consistent data recovery, copy data for secondary analytics functions, backup to object/cloud, and effective recovery from ransomware.
- **Hitachi SVOS global active device** enables high availability VSP system configurations to ensure continuous operations for mission critical applications with nonstop, uninterrupted data access to achieve strict zero RTO and RPO objectives.
- **Hitachi Thin Image snapshot software** can create point-in-time copies of mission-critical data within a VSP system or virtualized storage pool without impacting host servers or storage performance levels.

**Integrated Management and Security**

Hitachi Virtual Storage Platform with SVOS storage virtualization OS and Ops Center management suite enable a common data infrastructure architecture for simplified data management and self-driving storage operations to lower costs. With AI Ops insights, Hitachi storage software can enable orchestrated IT resource delivery with automated provisioning workflows and integrated analytics to optimize application to storage resources (VM, server, network, storage) to greatly improve IT operational efficiencies. Utilize built-in cyber resiliency capabilities with enterprise-class immutable data storage and protection features to properly protect all Hitachi virtualized storage assets from ransomware attacks.

To further eliminate risk of downtime or data loss, we offer a superior range of business continuity and recovery options including:

- **Remote Ops Monitoring** to provide cloud-based storage system health monitoring and predictive fault analysis for faster support responses, as well as application aware backup and recovery with integrated copy data management.
- **Business continuity** up to 500 km with metro clustering via Hitachi's global-active device
- **3 data center replication** which combines long distance disaster recovery (via asynchronous replication) and metro clustering (via GAD) for complete piece of mind.



## Additional Support

### Hitachi EverFlex

When capacity is difficult to accurately forecast or if operational efficiency needs to be at its peak on day one, the pay per use pricing model and services of Hitachi EverFlex can help. Every product, solution or offering from Hitachi Vantara is offered via EverFlex. With options to choose either pre-engineered, pre-designed and fully integrated solutions, or choosing a more custom designed one to meet unique and specific requirements, EverFlex provides the most choice in pay-per-use consumption to align costs with usage, lower acquisition and operational costs and improve service delivery to a business.

### Storage as a Service

Gain cloud economics and adaptability for your distributed workloads driving better business results with this service. Storage as a Service from Hitachi Vantara offers ease of deployment, and simplicity of control. The service enables customers to quickly access infrastructure services by reducing complex procurement and deployment cycles.

### Non-Disruptive Upgrades with Modern Storage Assurance

Our Modern Storage Assurance program eliminates complicated data migration and forklift upgrades with data-in-place migration with the ability to upgrade within 1-5 years to accelerate applications with the next generation storage architecture. This full data-in-place non-disruptive upgrade to our next generation data platform is available with each purchase made.

### Appliance Pricing

All VSP data storage services, as defined above, are licensed as part of either the Hitachi VSP Foundation or Advanced software packages. Since the VSP arrays are sold in an appliance form factor, the software is not purchased separately from the hardware.

## ABOUT HITACHI VANTARA

Hitachi Vantara, a wholly-owned subsidiary of Hitachi Ltd., delivers the intelligent data platforms, infrastructure systems, and digital expertise that supports more than 80% of the fortune 100. To learn how Hitachi Vantara turns businesses from data-rich to data-driven through agile digital processes, products, and experiences, visit [hitachivantara.com](https://hitachivantara.com)

## Contact Us →

Learn more about the most powerful Data platform in the world that will future proof your business and simplify day-to-day management.

## Hitachi Vantara

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